REMARKS/ARGUMENTS

This amendment is submitted in response to the Office Action dated March 9, 2005. Reconsideration and allowance is requested.

Claims 1-36 have been canceled by a previous amendment. Claim 39 has been canceled by the present amendment. Claims 37-38 and 40-64 remain in this application.

Formal Matters

Pursuant to 35 U.S.C 120 Counsel for assignee is claming the benefit of the earlier filed co-pending US application No. 09/622,570 which is now US Patent No. 6,753,972.

Counsel for assignee believes a valid claim for benefit of the earlier filed copending US application No. 09/622,570 which is now US Patent No. 6,753,972 can be made. Under 35 USC 120, a later filed application can benefit from an earlier filing date of a prior application if the later filed application: 1) is disclosed in the prior application, 2) is copending with the prior application, 3) is filed by an inventor or inventor named in the prior application, 4) is amended to contain a specific reference to the prior application, and 5) claims benefit during the pendency of the application and within the time period set forth in 37 CFR § 1.78 (a)(2)(ii) or with a petition under 37 CFR § 1.78 (a) (3).

Counsel for assignee believes the later filed application is disclosed in the prior filed application. There is copendency between the later filed application and the prior application because the later filed application was filed on February 20, 2002 and the prior application was not patented until June 22, 2004. The later filed application has been filed by several inventors including Takenori Hirose, who is also a named inventor in the prior application.

The later filed application contains a specific reference to the prior application because later filed application has been amended to include:

CROSS-REFERENCE TO RELATED APPLICATIONS
This is a continuation in part application of US
Application No. 09/622,570 which was the National Stage of
International Application No. PCT/JP99/02073 filed April 19,
1999.

The later filed application has claimed benefit during the pendency of the application but not within the time period set forth in 37 CFR § 1.78 (a)(2)(ii) so a petition under 37 CFR § 1.78 (a)(3) is being made. A petition for an unintentionally delayed domestic priority claim under 37 CFR 1.78(a)(3) and a(6) is in the appendix of this response. In accordance with 37 CFR § 1.78 (a)(3) this petition to accept an unintentionally delayed claim under 35 USC 120 for the benefit of a prior-filed application is accompanied by (i) the reference required by 35 USC 120 and paragraph a(2) of this section; (ii) the surcharge set forth in § 1.17(t); and (iii) a statement that the entire delay between the date the claim was due under paragraph a(2)(ii) and the date the claim was filed was unintentional.

Claim Rejection Under 35 USC 112

In section 1 of the Office Action, claim 40 was rejected under 35 USC 112 because there is insufficient antecedent basis for "said pattern." Claim 40 has been amended to recite "a pattern" instead of "said pattern."

In section 2 of the Office Action, claims 44-47 were rejected under 35 USC 112, second paragraph, as being indefinite because it is unclear what is being referred to with respect to "an interference component" and it is not clear how an interference component can be compared to light. Claim 44 has been amended to recite "light reflected from the pattern" instead of "an interference component." Claim 44 was also rejected because it is unclear if the thin film is the same element as the optically transparent film. Claim 44 has been amended to recite an optically transparent thin film.

In section 3 of the Office Action the Examiner rejected claims 37, 47-53 and 59 under 35 USC 112, second paragraph, as being indefinite because "surface ratio" is not clearly set forth since a ratio is a comparison and no comparison is defined in the claims. Claims 37 and 47 have been amended to recite that a surface area ratio of the structure to be measured occupying a measurement field of view.

In section 4 of the Office Action, claims 42 and 54 were rejected under 35 USC 112, second paragraph, as being indefinite because the recitation of "regional model" is not clearly set forth in the claims nor clearly defined in the specification. Claims 40, 42 and 54 have been amended to recite "boundary structural model" instead of "regional model."

Support for "boundary structural model" can be found in the last paragraph of page 23 of the originally filed specification.

Obviousness-type Double Patenting Rejection

In section 5 of the Office Action, claim 39 was rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of U.S. Patent No. 6,753,972. Claims 39 has been canceled so this rejection is now moot.

Claim Rejection Under 35 USC 102

In section 6 of the Office Action, claims 37-46 and 54-64 were rejected under 35 USC 102(e) as being anticipated by Hirose et at (US 6,753,972). Counsel for assignee is claming the benefit of the earlier filed co-pending US application No. 09/622,570 which is now US Patent No. 6,753,972. Since the pending application has been amended to be a continuation in part of Hirose et at US 6,753,972, counsel for assignee believes that claims 37-46 and 54-64 are patentable over Hirose.

In section 7 of the Office Action, claims 39 and 54 were rejected under 35 USC 102(b) as being anticipated by Tan et at (US 4,909,631). Since claim 39 has been canceled, its rejection is moot. Claim 54 has been amended to include the feature of claim 40, which was not rejected under Tan. Specifically claim 54 has been amended to include a boundary structure model and since Tan does not disclose a boundary structure model, currently amended claim 54 is distinguishable over Tan.

In section 8 of the Office Action, claim 60 was rejected under 35 USC 102(b) as being anticipated by Ebbing et at (US 4,953,982). Claim 60 has been amended to include determining plural measurement points on said wafer by frequency analysis or fitting. Counsel believes that Ebbing does not teach determining plural measurement points on said wafer by frequency analysis or fitting and therefore amended claim 60 is patentably distinct over Ebbing.

Claim Rejection Under 35 USC 103

In the Office Action, claims 37, 38, 43, 47, and 48-50 were rejected under 35 USC 103(a), as being unpatentable over Takeishi in view of Gaston et al (4,293,224). The counsel for assignee respectfully traverses.

In order to establish *prima facie* obviousness three basic criteria must be met. First, there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art references (or references when combined) must teach or suggest all of the claimed limitations. The teachings or suggestions to make the claimed invention and the reasonable expectation of success must be found in the prior art and not based on Applicant's disclosure. See In re Vaeck 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) And MPEP 2143. The counsel for assignee respectfully submits that the Examiner has not satisfied all three criteria outlined in MPEP 2143.

Counsel does not believe that Takeishi teaches "calculating the thickness of the optically transparent film using spectral waveform information from the detected reflected light," as stated in the Office Action. Specifically, Takeishi does not teach using a spectral waveform, as described in the originally filed specification, to calculate thickness. Therefore claims 37, 38, 43, 47, and 48-50 are not believed obvious under In re Vaeck and MPEP 2143.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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Enclosures

- Petition under 37 CFR 1.78(a)(3)

- Statement under 37 CFR 1.78(a)(3)

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